

GENERIC SATELLITE POSITIONING SYSTEM RECEIVERS
WITH PROGRAMMABLE INPUTS AND SELECTABLE INPUTS AND OUTPUTS

BACKGROUND OF THE INVENTION

1. Cross References to Related Applications

3P [001] This application ^{is a national stage application filed under 35 U.S.C. 371} claims priority of U.S. Patent Application Serial No. 10/177,128 filed June 20, 2002 and U.S. Patent Application Serial No. 10/177,982 filed June 20, 2002, both

incorporated by reference into this application. ^{See International Application}

2. Field of the Invention

^{PCT/US03/19363, filed June 12, 2003, which}
^{claimed}

[002] The present invention relates in general to Satellite Positioning System (SATPS) systems and in particular to generic Satellite Positioning System (SATPS) receivers and related methods.

3. Description of the Related Art

[003] Use of wireless communicators such as cellular telephones, Personal Communication System (PCS) devices, and Personal Data Assistant (PDA) devices, has become commonplace. Such devices can provide voice, data, and other services, such as internet access, affording many conveniences to cellular system users.

[004] The cellular and PCS arenas have recently integrated Satellite Positioning System (SATPS) technology, including Global Positioning System (GPS) technology, into wireless transceiver devices such as the cellular telephone. For example, U.S. Patent No. 5,874,914, issued to Krasner, which is incorporated by reference herein, describes a conventional method wherein the basestation (also known as the Mobile Telephone Switching Office (MTSO)) transmits GPS satellite information, including Doppler information, to a remote unit using a cellular data link, and then computes pseudoranges to the in-view satellites without receiving or using satellite ephemeris information.

[005] This current interest in integrating GPS with cellular telephony stems from a recent Federal Communications Commission (FCC) regulations requiring that cellular telephones be locatable within 20 feet when an emergency call, such as a "911" call (also referred to as